

Amendment Under 37 C.F.R. § 1.111  
Serial No.: 10/705,930  
SUGHRUE MION, PLLC Ref: Q77813

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

Claim 1 (currently amended): A Methodmethod of fabricating an optical fiber, comprising the following steps: ~~a silica-based glassy material, wherein deuterium is injected in a fiber drawing device~~

providing a fiber drawing device;

introducing a perform into the fiber drawing device, the perform includes silica doped with at least one of germanium and fluorine; and

injecting deuterium into the fiber drawing device to reduce OH-content in the fiber drawing device when drawing of the optical fiber therethrough.

Claim 2 (original): Method according to claim 1, wherein the deuterium is injected as part of a gas mixture.

Claim 3 (original): Method according to claim 1, wherein the deuterium is contained in an atmosphere of inert and/or appropriate protective gases, in particular a nitrogen, helium or CO<sub>2</sub> atmosphere.

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Claim 4 (original): Method according to claim 3, wherein the helium atmosphere contains about 1% deuterium.

Claim 5 (original): Method according to claim 1, wherein deuterium is introduced into the fiber drawing device before and/or after drawing the optical fiber.

Claims 6 and 7: (canceled).